Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) An apparatus to intravascularly promote hemostasis at a blood vessel puncture site having an inner lumen pressure and an outer lumen pressure, wherein the inner lumen pressure is greater than the outer lumen pressure, the apparatus comprising:

a flexible plug having a center, a top surface, and a bottom surface, the plug being sized to circumferentially cover the blood vessel puncture site and further being sufficiently flexible to conform to and seal the blood vessel puncture site; and

a release mechanism including a hemostatic material having a bottom attached to the top surface near the center of the flexible plug, [[and]] a resilient extension member attached to a top of the hemostatic material, the resilient extension member having [[an]] a transverse aperture therein, and a suture passing through the aperture to secure the suture to the resilient extension member, the release mechanism positioning and releasing the flexible plug intravascularly at the blood vessel puncture site;

wherein the suture is not directly attached to the flexible plug.

2-26. (Canceled)

27. (Previously Presented) The apparatus of claim 1 wherein the hemostatic material is encapsulated in a biocompatible dissolvable capsule.

28. (Canceled)

29. (Withdrawn) An apparatus to position and release a flexible plug at a blood vessel puncture site, comprising:

a first connector having a lumen, a first end, second end, a first notch positioned near the second end, said first connector first end coupled to a center of the flexible plug;

a second connector having a lumen, a top, a bottom, and a second notch

positioned near the bottom;

wherein the second connector bottom is received by the first notch and the first connector second end is received by the second notch.

30. (Withdrawn) The apparatus of claim 29 further comprising a guidewire received by the second connector lumen and the first connector lumen to secure the first connector and the second connector together.

31. (Withdrawn) The apparatus of claim 29 wherein the first connector further comprises an entrance port positioned substantially near the first end to receive a flow of blood from the blood vessel.

32. (Withdrawn) The apparatus of claim 31 wherein the second connector further comprises an exit port positioned substantially near the second end top, wherein the flow of blood entering the entrance port exits.

33. (Withdrawn) The apparatus of claim 29 further comprising a hemostatic material coupled to the first connector first end.

34-39. (Canceled)

40. (Currently Amended) An apparatus to promote hemostasis at a blood vessel puncture site having an inner lumen pressure and an outer lumen pressure, wherein the inner lumen pressure is greater than the outer lumen pressure, the apparatus comprising:

a flexible disk to intravascularly seal a blood vessel puncture site, the disk being sized to circumferentially cover the blood vessel puncture site and further being sufficiently flexible to conform to and seal with the blood vessel puncture site;

a hemostatic body to seal the blood vessel puncture site; and

a connector disposed between the flexible disk and the hemostatic body, the connector coupling ~~to couple~~ the flexible disk to the hemostatic body, the connector

positioned within a wall of the blood vessel puncture site.

41. (Original) The apparatus of claim 40 wherein the connector has a smaller diameter than a flexible disk diameter and a hemostatic body diameter.

42. (Original) The apparatus of claim 40 further comprising a release mechanism coupled to the hemostatic body.

43. (Original) The apparatus of claim 42 wherein the release mechanism is a suture having a first end secured with an adhesive to the hemostatic body.

44. (Original) The apparatus of claim 40 wherein the release mechanism comprises a resilient extension member coupled to the center of the hemostatic body, the resilient extension member having an aperture at a top.

45. (Original) The apparatus of claim 44 further comprising a suture looped through the aperture.

46. (Original) The apparatus of claim 44 wherein the resilient extension member is made of hemostatic material.

47. (Original) The apparatus of claim 46 wherein the extension member is encapsulated with a biocompatible dissolvable capsule.

48. (Original) The apparatus of claim 44 wherein the resilient extension member further comprises a hemostatic material positioned at a center of the resilient extension member.

49. (Original) The apparatus of claim 48 wherein the resilient extension member is encapsulated with a biocompatible dissolvable capsule.

50-60. (Canceled)

61. (Previously Presented) The apparatus of claim 1, wherein the bottom of the hemostatic material is removably attached to the top surface of the flexible plug.

62. (Previously Presented) The apparatus of claim 1, wherein the suture is secured to the resilient extension member by tying one end of the suture to itself after passing through the aperture.